

REMARKS

The Applicants like to thank the Examiner for providing the opportunity for a telephonic interview. Claims 1-21 were submitted for examination. Claims 1, 3, 8, 10-12, and 18 were withdrawn in a previously filed response to a restriction requirement. In this Office Action, claim 14 has been objected to. Claims 2, 4-6, 7, 9, 13, 15-17, 19-21 have been rejected. The Applicants respectfully traverse the pending rejections for the reasons set forth below.

Rejections Under 35 U.S.C. § 102(e)

Claims 2, 4-6, 16, and 19 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,351,474 (Robinett et al.). The Applicants respectfully traverse the rejections.

Robinett et al. disclose a re-multiplexing scheme, in which a user may select desired programs in different input transport streams (e.g., TS1 and TS2), and packets corresponding to such selected programs may be extracted from different input transport streams based on PIDs and multiplexed to form one output transport stream (e.g., TS3) (column 22, lines 15-53). In operation, the remultiplexing scheme of Robinett et al. selects only desired packets with appropriate PIDs in each of the input transport streams and discards all packets that are not desired (column 15, lines 34-49, column 20, lines 52-65). Each selected desired packet is described by a receiving stamp and an estimated departure time, computed by adding an internal buffer delay to the receiving time (column 21, lines 41-44), where the internal buffer delay is considered uniform to all selected desired packets.

According to Robinett et al., an output transport stream is a re-multiplexed transport stream generated by outputting the desired packets selected from different input transport streams (i.e., at this point, all undesired packets have been discarded) in an order of an actual

dispatch time determined for each of the desired packets based on the estimated departure time (column 24, lines 21-45). Notably, during a re-multiplexing operation, according to Robinett, no undesired packet from any input transport streams is retained. Thus, there is no overwriting of a necessary packet (or desired packet) from one TS (e.g., second TS) in an area originally occupied by an unnecessary packet (undesired packet) of a different TS (e.g., first TS). During the telephonic interview, the Examiner took the position that when packets are re-multiplexed, subsequent multiplexing a packet from a second TS stream after a packet from a first TS stream can be interpreted as “overwriting”. The Applicants respectfully point out that the term “overwriting” is defined as “writing new data over what is already there” (see The_TechRef_Glossary), “to lose or destroy old data by recording new data over it”, or “to record new data on top of already stored data, thus destroying the old data” (see online dictionary). Based on such definitions commonly understood by ordinary persons skill in the art, “overwriting” requires that new data is written to a space originally occupied by old data. Since Robinett et al. discard undesired packets, there is no “old data” to be overwritten. Therefore, subsequent multiplexing packets from different TS streams can not be interpreted as “overwriting”, as stated by the Examiner.

Claim 2 recites the feature of “rewriting” necessary packets (desired packets) in areas occupied by unnecessary packets (undesired packets). The Examiner correctly points out that “Robinett does not specifically teach overwriting packets extracted from the second TS ... to the unnecessary packets areas in the first TS ...” (page 6 of the Office Action). It is well-settled that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Robinett et

al. fail to disclose and teach the feature of “rewriting”, as recited in claim 2, the Applicants respectfully submits that Robinett et al. do not anticipate claim 2. Thus, claim 2 is patentable. Therefore, the Applicants respectfully request that the rejection of claim 2 under 35 U.S.C. §102(e) be withdrawn.

Claims 4-6, 16 and 19 depend from claim 2. Therefore, claims 4-6, 16, and 19 are patentable at least for the reasons stated above with respect to claim 2 and for the additional features recited therein. The Applicants respectfully request that rejections of claims 4-6, 16, and 19 be withdrawn.

Rejections Under 35 U.S.C. § 103(a)

Claims 7, 9, 13 and 15 have been rejected under under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,351,474 (Robinett et al.). The Applicants respectfully traverse.

Claim 7 recites the feature of “packet-overwriting”. In the Office Action, the Examiner stated “Robinett et al. does not specifically [teach] ... packet-overwriting means ..., however, Robinett et al. teach the method and system to perform the limitations and it has to have means to perform those limitations.” (see page 4). The Applicants respectfully point out that this statement is self-contradicting and, in addition, the Examiner shows no further evidence that can be used to show that the feature of “packet-overwriting” is obvious. Without such evidence, there is no basis for establishing a prima facie case of obviousness. Thus, claim 7 is not obvious over Robinett et al. and is patentable. The Applicants respectfully request that rejection of claim 7 under 35 U.S.C. § 103(a) be withdrawn.

Claims 9, 13, and 15 depend from claim 7. Therefore, claims 9, 13, and 15 are patentable at least for the reasons stated above with respect to claim 7 and for the additional features recited

therein. The Applicants respectfully request that rejections of claims 9, 13, and 15 be withdrawn.

Claim 17 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 11-122556 (Saeki Hiroaki), in view of Robinett et al. The Applicants respectfully traverse.

According to Horiaki, if two desired packets from an input transport stream are adjacent to each other, due to time splitting, these two desired packets may not be adjacent in an output transport stream. According to the present invention, such two adjacent packets from the same input transport stream will remain adjacent in an output transport stream because desired packets from another input stream are overwritten only in those areas occupied by undesired packets of the first input stream. In addition, claim 17 recites “a packet-overwriting means for overwriting packets extracted by said necessary-packet extracting means to said unnecessary-packet areas”. The Examiner correctly pointed out that “Saeki [Hiroaki] does not specifically teach extracting one necessary packet and overwrite to the unnecessary packets area”. As discussed above and conceded by the Examiner, Robinett et al. do not teach “overwriting”.

According to MPEP §2142, to establish a prima facie case of obviousness, there must be some suggestion or motivation to modify the reference or to combine reference teachings. In the instance case, first, Hiroaki does not motivate or suggest incorporating the feature of overwriting. Without such required suggestion or motivation, a prima facie case of obviousness can not be established. Second, even if combined, the combination of Hiroaki and Robinett et al. does not remedy the deficiencies of Hiroaki. Therefore, claim 17 is not obvious over and Robinett et al. Therefore, the Applicants respectfully request that rejection of claim 17 be withdrawn.

Claims 20-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Robinett, in view of U.S. Patent No. 5,691,986 (Pearlstein). The Applicants respectfully traverse.

Both claims 20 and 21 recite “overwriting packets extracted from said second TS to the unnecessary-packet areas corresponding to said unnecessary PIDs detected in said first TS.” As discussed above, Robinett et al. do not teach the feature of “overwriting”. In the Office Action, the Examiner asserted that “Pearlstein teaches [that the] transport stream could replace the packet before the multiplexing.” (page 6 of the Office Action). Pearlstein teaches a method to reduce a bitrate of a bitstream by modifying the bitstream. Pearlstein does not address the problem of multiplexing more than one transport stream to produce a single output transport stream. Robinett et al.’s teaching is about re-multiplexing multiple input transport streams into one single transport stream. Therefore, there can be no motivation for Robinett et al. to suggest a combination with Pearlstein. In addition, Robinett et al. achieve multiplexing by simply discarding all undesired packets, so there can be no motivation for Robinett et al. to suggest “overwriting” because there is nothing to be overwritten. Furthermore, since Pearlstein does not process multiple input transport streams, even if Pearlstein is combined with Robinett et al., the combination does not remedy the deficiency of Robinett et al. Thus, the Examiner can not establish a prima facie case of obviousness. Therefore, claims 20 and 21 are not obvious over Robinett et al. in view of Pearlstein. The Applicants respectfully request that rejections of claims 20 and 21 be withdrawn.

Objection

Claim 14 has been objected to as being dependent upon a rejected base claim (claim 7). As discussed above, claim 7 is patentable. Therefore, claim 14 is patentable at least for the reasons stated above with respect to claim 7 and for the additional features recited therein. The Applicants respectfully request that objection of claim 14 be withdrawn.

The Applicants have addressed all rejections/objection raised by the Examiner. Accordingly, it is believed that all pending claims are now in condition for allowance. Applicants therefore respectfully request an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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